

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants : R. Fischer et al.  
Serial No. : 10/578,403  
Filed : November 13, 2006  
For : 2-Halogen-6-Alkyl-Phenyl substituted Spirocyclic Tetramic  
Acid Derivatives  
Group Art Unit : 1626  
Examiner : BIANCHI, KRISTIN A

**DECLARATION**

Dr. Heinz Kehne hereby declares:

- that he is a chemist having studied at the University of Göttingen, Germany;
- that he received his doctor's degree in chemistry at the University of Göttingen, Germany in 1981;
- that he entered the employ of Bayer Cropscience (or the predecessor companies Hoechst, Agrevo, Aventis resp.) in 1982;
- that he has specialized in plant protection biology since 2002;



## Biological Examples

### **1. *Pre-emergence herbicidal action***

Seeds of monocotyledonous and dicotyledonous weeds and/or crops are placed in sandy loam and covered with soil.

The compounds which are formulated as wettable powders or emulsifiable concentrates are dissolved and diluted with water containing adjuvant and are then applied to the surface of the covering soil at different dose rates at an application volume of 800 or 1000 litres water per ha.

After the treatment, the pots are placed in the greenhouse and kept under good growth conditions for the plants.

The herbicidal effect is assessed visually as per-cent-figure in comparison to the untreated control three to four weeks after application. 100 % efficacy refers to the complete damage of the assessed plants, 0 % efficacy refers to the appearance of the untreated control.

### **2. *Post-emergence herbicidal action***

Seeds of monocotyledonous and dicotyledonous weeds and/or crops are placed in sandy loam, covered with soil and grown under good greenhouse conditions.

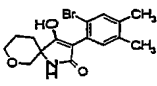
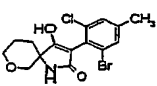
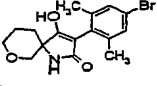
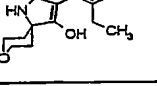
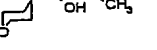
The plants are treated at one-leaf-stage two to three weeks after sowing.

The compounds which are formulated as wettable powders or emulsifiable concentrates are dissolved and diluted with water containing adjuvant and are then applied over the top of the plants at different dose rates at an application volume of 800 or 1000 litres water per ha.

After the treatment, the pots are placed in the greenhouse and kept under good growth conditions for the plants.

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The herbicidal effect is assessed visually as per-cent-figure in comparison to the untreated control three to four weeks after application. 100 % efficacy refers to the complete damage of the assessed plants, 0 % efficacy refers to the appearance of the untreated control.

Structure	Substance	Test type	Dosage	Unit	Test object				
					ALOMY	AVEPA	EQ100	SEIMI	GALAP
		VA	250	g/ha	0	30	20	0	70
		VA	250	g/ha		80	50	90	90
		VA	250	g/ha	60	10		80	0
		VA	320	g/ha	100	90	70	90	100
		VA	80	g/ha	80	70		90	100

VA = Voraufbau (pre-emergent)

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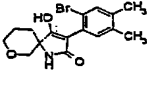
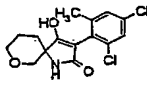
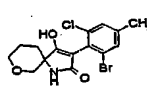
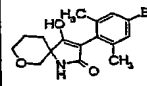
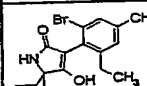
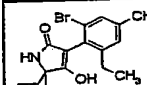
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according to the invention

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# Bayer CropScience

Structure	Substance	Test type	Dosage	Unit	Test object	ALOMY	AVEFA	SETN
		NA	250	g/ha	0	0	0	
		NA	250	g/ha	50	0	0	
		NA	250	g/ha	50			
		NA	250	g/ha	50			
		NA	320	g/ha	90	100	90	
		NA	80	g/ha	90	90	90	

NA = Nachauflauf (post-emergent)

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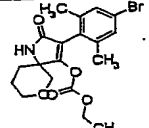
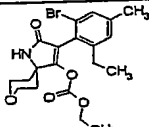
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according to the invention

Structure	Substance	Test type	Dosage	Unit	Test object	ALOMY	SETN
		NA	250	g/ha	50	50	
		NA	80	g/ha	90	90	

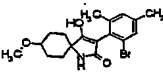
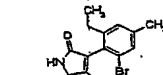
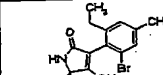
NA = Nachauflauf (post-emergent)

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according to the invention

Structure	Substance	Test type	Dosage	Unit	Tested	BEA	ALOM	AVEA	SEMI	ABUTH
		NA	250 g/ha			40	100	99	100	30
		NA	320 g/ha			0	100	100	100	70
		NA	80 g/ha			0	100	100	100	50

NA = Nachauflauf (post-emergent)

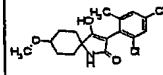
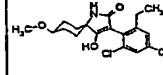
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according to the invention

Structure	Substance	Test type	Dosage	Unit	Tested	ALOM	AVEA	AMARE
		NA	250 g/ha			95	95	70
		NA	250 g/ha			100	100	80

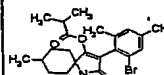
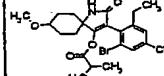
NA = Nachauflauf (post-emergent)

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according to the invention

Structure	Substance	Test type	Dosage	Unit	Tested	ALOM	AVEA	SEMI	ABUTH
		NA	250 g/ha			50	10	0	0
		NA	80 g/ha			100	100	100	50

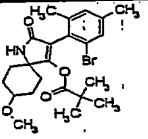
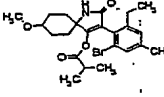
NA = Nachauflauf (post-emergent)

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according to the invention

Structure	Substance	Test type	Dosage	Unit	Testobjekt	BEAVA	ALOMV	AVEFA	SEMI
		NA	125 g/ha			50	99	80	90
		NA	80 g/ha			0	100	100	100

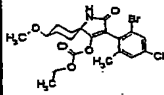
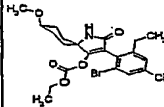
NA = Nachauflauf (post-emergent)

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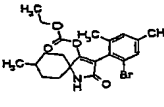
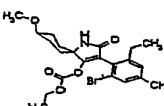
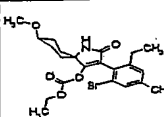
Structure	Substance	Test type	Dosage	Unit	Testobjekt	BEAVA	ALOMV	AVEFA	SEMI	BEVA	ECICO	SEMI
		NA	80 g/ha			60	90	10	0	40	80	90
		NA	80 g/ha			10	100	100	50	100	100	100

NA = Nachauflauf (post-emergent)

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according to the invention

Structure	Substance	Test type	Dosage	Unit	Testobjekt	ALOMV	AVEFA	SEMI	BEVA	ECICO	SEMI
		NA	250 g/ha			70	30	0	60	0	0
		NA	320 g/ha			100	100	70	100	80	70
		NA	80 g/ha			100	100	50	100	50	60

NA = Nachauflauf (post-emergent)

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according to the invention

Structure	Substance	Test type	Dosage	Unit	Tested	BEVA	MEFA	SETV
		VA	250 g/ha			90	80	99
		VA	320 g/ha			0	90	100
		VA	80 g/ha			0	90	100

VA = Voraufbau (pre-emergent)

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according to the invention

Structure	Substance	Test type	Dosage	Unit	Tested	BEVA	MEFA	SETV
		VA	250 g/ha			95		
		VA	250 g/ha			99		

VA = Voraufbau (pre-emergent)

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according to the invention

Structure	Substance	Test type	Dosage	Unit	Tested	BEVA	MEFA	SETV
		VA	250 g/ha			80	80	
		VA	320 g/ha			0	100	
		VA	80 g/ha			0	100	

VA = Voraufbau (pre-emergent)

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according to the invention

Structure	Substance	Test type	Dosage	Unit	Testobjekt	BEWA	SETV
		VA	250 g/ha			90	80
		VA	320 g/ha			0	100
		VA	80 g/ha			0	100

VA = Voraufbau (pre-emergent)

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according to the invention

Structure	Substance	Test type	Dosage	Unit	Testobjekt	ALOM	AVEA	DIGA	EGCG	SEMI	SORH	GALAP
		VA	320 g/ha			90	60	50	80	90	80	30
		VA	320 g/ha			100	90	80	100	100	100	80

VA = Voraufbau (pre-emergent)

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Structure	Substance	Test type	Dosage	Unit	Testobjekt	BEWA	GALAP
		VA	250 g/ha			80	0
		VA	320 g/ha			0	80
		VA	80 g/ha			0	80

VA = Voraufbau (pre-emergent)

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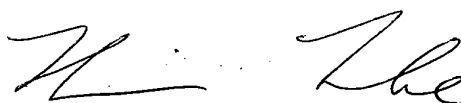
according to the invention



The undersigned declarant hereby declares that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

March 11, 2009

Date

A handwritten signature in cursive script, appearing to read 'H. Kehne', written in dark ink.

Dr. Heinz Kehne